

CR #96-0304b

**he Changes for CLS DESKT Level 4 requirements and their RbR parents to be made in RTM.**

his Version (B) differ from the original version of this CCR by the following changes

Version (B) includes two new links: S-CLS-10642 to IMS-0120#A and S-CLS-10645 to IMS-0100#A. The Reference and link tables show these linkages and the links are reflected in the new links table.

There are editorial change made from the original version.

An update to the rqt type for RBR IMS-0120#A is made from (typo) security to functional. The RBR requirement is currently correct in RTM and needs no change.

The specification for the proposed new requirement S-CLS-01615 is removed from this version of the CCR. The mapping of the proposed new requirement, S-CLS-01615, is questionable as it is written. The Reference Table, New Requirement Table, and Link Table are update to reflect the removal of this requirement. The RBR, IMS-0100#A has another Level 4 requirement link to it and is not made a parent-without-child type requirement.

Tables showing the mandatory attribute for the Level 4 requirements are added to this CCR.

**Table 1: Table 1 represents the Reference Table of the changes that are to be made based upon the information in this CCR.**

ersion (A) includes two new links: S-CLS-10642 to IMS-0120#A and S-CLS-10645 to IMS-0100#A. The link table is changed to reflect the new links. here are editorial change made from the original version. An update to the rqt type for RBR IMS-0120#A is made from (typo) security to functional.

4 ID	Rel	RTM Key	L4 Text	Clarific	Req Type	RbR ID	RTM key	RbR Text	RbR Type	Interpret
S-CLS-00080	A	9130	The DESKT CI shall provide a GUI interface with self-explanatory error messages <u>either through Message/Error Dialogs or through message area.</u>		functional					
S-CLS-00140	A_B	2436	The DESKT CI shall provide a standard widget set for building a user interface.		functional	IMS-0120#A	5474	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information base of associations between variables (e.g., between instruments and geophysical parameters) f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	functional	A: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT NOT AVAILABLE

## CR #96-0304b

<del>3</del> -CLS-00140						IMS-1380#A	5554	The IMS shall provide the capability to integrate the element toolkits with a common user interface.	functional	
<del>3</del> -CLS-00150	B <del>A</del>	8064	The DESKT CI shall provide container desktop objects.		functional	IMS-0120#A	5474		functional	A: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT NOT AVAILABLE
<del>3</del> -CLS-00160	B <del>A</del>	8065	The DESKT CI shall provide document desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<del>3</del> -CLS-00170	B <del>A</del>	8066	The DESKT CI shall provide application desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<del>3</del> -CLS-00180	B <del>A</del>	8067	The DESKT CI shall provide users the capability to execute software associated with a desktop object.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<del>3</del> -CLS-00190	B <del>A</del>	8068	The DESKT CI shall provide users the capability to create desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE

## CR #96-0304b

<u>3-CLS-00200</u>	B A	8069	The DESKT CI shall provide users the capability to destroy desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00210</u>	B A	8070	The DESKT CI shall provide users the capability to open desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00230</u>	B A	8072	The DESKT CI shall provide users the capability to copy a desktop object.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00250</u>	B A	8074	The DESKT CI shall provide users the capability to move desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00290</u>	B A	8078	The DESKT CI shall provide users the capability to bind a service to a desktop object.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE

## CR #96-0304b

<u>3-CLS-00290</u>						EOSD5040# A	5179	ECS shall enable the combination of services from ECS and other data providers in arbitrary, i.e. non-predefined, ways as needed by users to conduct EOS science.	evolvable	The client subsystem allows a use to select which services he wishes to use, integrate his own services, and use the services in any order that user wishes
<u>3-CLS-00300</u>	B A	8080	The DESKTOP CI shall provide users the capability to invoke any service bound to a desktop object.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00300</u>						EOSD5040# A	5179	ECS shall enable the combination of services from ECS and other data providers in arbitrary, i.e. non-predefined, ways as needed by users to conduct EOS science.	evolvable	The client subsystem allows a use to select which services he wishes to use, integrate his own services, and use the services in any order that user wishes
<u>3-CLS-00330</u>	B A	8083	The DESKTOP CI shall provide users the capability to add desktop objects to container objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE

## CR #96-0304b

<u>3-CLS-00330</u>						IMS-0190#A	<u>5480</u>	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.	functional	
<u>3-CLS-00340</u>	B A	8084	The DESKT CI shall provide users the capability to remove desktop objects from container objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00340</u>						IMS-0190#A	5480	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.	functional	
<u>3-CLS-00345</u>	A	<u>new</u>	<u>The DESKT CI shall provide users the capability to undo the last removal of desktop objects from container objects.</u>		<u>functional</u>	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00345</u>						IMS-0190#A	5480	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.	functional	

## CR #96-0304b

<u>3-CLS-00370</u>	B <u>A</u>	8087	The DESKT CI shall provide users the capability to browse the objects contained in container objects <u>and view the objects by modification date and size.</u>		functional	IMS-0190#A	5480	The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.	functional	
<u>3-CLS-00380</u>	B <u>A</u>	8088	The DESKT CI shall provide users the capability to display, <del>on a continuous basis,</del> the objects contained in container objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00390</u>	B <u>A</u>	8089	The DESKT CI shall provide the capability to iconically represent desktop objects, <u>allow single or multiple icons to be selected, and highlight icons when selected.</u>		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-00400</u>	B <u>A</u>	8090	The DESKT CI shall provide the capability to textually represent desktop objects.		functional	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE
<u>3-CLS-01500</u>	B <u>A</u>	8105	The DESKT CI user interface shall conform to the guidelines in <del>Version 4.0 of the ECS User Interface Style Guide (June 1, 1994).</del> <u>and ECS Motif Developers Guide.</u>		standards	IMS-0120#A	5474		functional	B: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT BECOME AVAILABLE

## CR #96-0304b

<u>3-CLS-01500</u>						IMS-0150#A	5477	The IMS shall supply a uniform user interface for access to the following at a minimum: a. Heterogeneous data sets b. Communications networks c. Data bases that are geographically dispersed d. Multi-disciplined directories and inventories	security	
<u>3-CLS-01610</u>	A	2449	The DESKT CI shall provider users with the ability to change the default icon size. <u>select among four icons sizes like tiny, small, medium and large.</u>		functional					
<u>3-CLS-01620</u>	A B	2450	The DESKT CI shall provide users the ability to change the spacing of icons. <u>directly manipulate icon positioning and to save the icon positioning.</u>		functional					
<u>3-CLS-01625</u>	A	<u>new</u>	<u>The DESKT CI shall provide the capability to drag and drop desktop objects to perform functions like move, copy and invoke related applications.</u>		<u>functional</u>	IMS-0100#A	5472	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface	interface	
<u>3-CLS-01627</u>	A	<u>new</u>	<u>The DESKT CI shall provide a mechanism to save the screen location of all programs it is managing.</u>		<u>functional</u>	IMS-0100#A	5472	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface	interface	
<u>3-CLS-10642</u>	A	<u>new</u>	<u>The DESKT CI shall provide an easy way for an unregistered user to find out how to register through Help.</u>		<u>functional</u>	IMS-0550#A	5512	The IMS shall allow a user to locate and identify desired data without detailed knowledge of the ECSs: a. Architecture b. Data Base management system c. Data Base structure d. Query languages e. Data formats	functional	



## CR #96-0304b

<u>i-CLS-10642</u>						IMS-0120#A	5474	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information base of associations between variables (e.g., between instruments and geophysical parameters) f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	functional	A: VALID LISTS FOR VARIABLES FOR ASTER PRODUCT NOT AVAILABLE
<u>i-CLS-10645</u>	A	new	The DESKT CI shall support logins by science users who do not have DCE on their workstations, as well as the operators who do have DCE.		<u>functional</u>	IMS-0030#A	5464	The IMS shall provide from each ECS access node, access to the full range of services spanning the whole of ECS, including data and services available from all DAACs without requiring that the user know the physical location of the data.	functional	
<u>i-CLS-10645</u>						IMS-0100#A	5472	The IMS shall support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface	interface	

CR #96-0304b

**ABLE 2: Table 2 shows the LEVEL\_4 reuirements that shall be modified by this CCR.**

L4 ID	Rel	RTM Key	L4 Text	Clarification	Req Type
S-CLS-00080	A	9130	The DESKT CI shall provide a GUI interface with self-explanatory error messages <u>either</u> through Message/Error Dialogs or through message area.		functional
S-CLS-00140	<del>A</del> B	2436	The DESKT CI shall provide a standard widget set for building a user interface.		functional
S-CLS-00150	B <del>A</del>	8064	The DESKT CI shall provide container desktop objects.		functional
S-CLS-00160	<del>B</del> <del>A</del>	8065	The DESKT CI shall provide document desktop objects.		functional
S-CLS-00170	B <del>A</del>	8066	The DESKT CI shall provide application desktop objects.		functional
S-CLS-00180	B <del>A</del>	8067	The DESKT CI shall provide users the capability to execute software associated with a desktop object.		functional
S-CLS-00190	B <del>A</del>	8068	The DESKT CI shall provide users the capability to create desktop objects.		functional
S-CLS-00200	B <del>A</del>	8069	The DESKT CI shall provide users the capability to destroy desktop objects.		functional
S-CLS-00210	B <del>A</del>	8070	The DESKT CI shall provide users the capability to open desktop objects.		functional
S-CLS-00230	B <del>A</del>	8072	The DESKT CI shall provide users the capability to copy a desktop object.		functional
S-CLS-00250	B <del>A</del>	8074	The DESKT CI shall provide users the capability to move desktop objects.		functional
S-CLS-00290	B <del>A</del>	8078	The DESKT CI shall provide users the capability to bind a service to a desktop object.		functional
S-CLS-00300	B <del>A</del>	8080	The DESKT CI shall provide users the capability to invoke any service bound to a desktop object.		functional
S-CLS-00330	B <del>A</del>	8083	The DESKT CI shall provide users the capability to add desktop objects to container objects.		functional
S-CLS-00340	B <del>A</del>	8084	The DESKT CI shall provide users the capability to remove desktop objects from container objects.		functional
S-CLS-00370	B <del>A</del>	8087	The DESKT CI shall provide users the capability to browse the objects contained in container objects <u>and view the objects by modification date and size.</u>		functional
S-CLS-00380	B <del>A</del>	8088	The DESKT CI shall provide users the capability to display <del>on a continuous basis</del> the objects contained in container objects.		functional
S-CLS-00390	B <del>A</del>	8089	The DESKT CI shall provide the capability to iconically represent desktop objects, <u>allow</u> single or multiple icons to be selected, and <u>highlight icons when selected.</u>		functional
S-CLS-00400	B <del>A</del>	8090	The DESKT CI shall provide the capability to textually represent desktop objects.		functional
S-CLS-01500	B <del>A</del>	8105	The DESKT CI user interface shall conform to the guidelines in Version 4.0 of the ECS User Interface Style Guide <del>(June 1, 1994).</del> and ECS Motif Developers Guide.		standards
S-CLS-01610	A	2449	The DESKT CI shall provider users with the ability to <del>change the default icon size.</del> <u>select among four icons sizes like tiny, small, medium and large.</u>		functional
S-CLS-01620	<del>A</del> B	2450	The DESKT CI shall provide users the ability to <del>change the spacing of icons.</del> <u>directly manipulate icon positioning and to save the icon positioning.</u>		functional

CR #96-0304b

**ABLE 3: Table 3 shows the new requirements that shall be added to RTM MAIN via this CCR.**

<b>L4 ID</b>	<b>Req Type</b>	<b>Rel</b>	<b>RTM Key</b>	<b>L4 Text</b>	<b>Rqt Status</b>	<b>Verification Method</b>	<b>Clarification</b>
<u>3-CLS-00345</u>	<u>functional</u>	<u>A</u>	<u>new</u>	<u>The DESKT CI shall provide users the capability to undo the last removal of desktop objects from container objects.</u>	<u>incremental</u>	<u>test</u>	
<u>3-CLS-01625</u>	<u>functional</u>	<u>A</u>	<u>new</u>	<u>The DESKT CI shall provide the capability to drag and drop desktop objects to perform functions like move, copy and to invoke related applications.</u>	<u>incremental</u>	<u>test</u>	
<u>3-CLS-01627</u>	<u>functional</u>	<u>A</u>	<u>new</u>	<u>The DESKT CI shall provide a mechanism to save the screen location of all programs it is managing.</u>	<u>incremental</u>	<u>test</u>	
<u>3-CLS-10642</u>	<u>functional</u>	<u>A</u>	<u>new</u>	<u>The DESKT CI shall provide an easy way for an unregistered user to find out how to register through Help.</u>	<u>incremental</u>	<u>test</u>	
<u>3-CLS-10645</u>	<u>functional</u>	<u>A</u>	<u>new</u>	<u>The DESKT CI shall support logins by science users who do not have DCE on their workstations, as well as the operators who do have DCE.</u>	<u>incremental</u>	<u>test</u>	

CR #96-0304b

**ABLE 4: Table 4 shows the LEVEL\_4 to REQ\_BY\_REL Links that shall be created via this CCR.**

There are two new requirements links added to this table since the original version: S-CLS-10642 to IMS-0120#A and S-CLS-10645 to IMS-0100#A

<b>RbR ID</b>	<b>L4 ID</b>
EOSD5040#A	<u>S-CLS-00290</u>
EOSD5040#A	<u>S-CLS-00300</u>
IMS-0030#A	<u>S-CLS-10645</u>
IMS-0100#A	<u>S-CLS-01625</u>
IMS-0100#A	<u>S-CLS-01627</u>
IMS-0100#A	<u>S-CLS-10645</u>
IMS-0120#A	<u>S-CLS-00150</u>
IMS-0120#A	<u>S-CLS-00160</u>
IMS-0120#A	<u>S-CLS-00170</u>
IMS-0120#A	<u>S-CLS-00180</u>
IMS-0120#A	<u>S-CLS-00190</u>
IMS-0120#A	<u>S-CLS-00200</u>
IMS-0120#A	<u>S-CLS-00210</u>
IMS-0120#A	<u>S-CLS-00230</u>
IMS-0120#A	<u>S-CLS-00250</u>
IMS-0120#A	<u>S-CLS-00290</u>
IMS-0120#A	<u>S-CLS-00300</u>
IMS-0120#A	<u>S-CLS-00330</u>
IMS-0120#A	<u>S-CLS-00340</u>
IMS-0120#A	<u>S-CLS-00345</u>
IMS-0120#A	<u>S-CLS-00380</u>
IMS-0120#A	<u>S-CLS-00390</u>
IMS-0120#A	<u>S-CLS-00400</u>
IMS-0120#A	<u>S-CLS-01500</u>
IMS-0120#A	<u>S-CLS-10642</u>
IMS-0150#A	<u>S-CLS-01500</u>
IMS-0190#A	<u>S-CLS-00330</u>
IMS-0190#A	<u>S-CLS-00340</u>
IMS-0190#A	<u>S-CLS-00345</u>
IMS-0190#A	<u>S-CLS-00370</u>
IMS-0550#A	<u>S-CLS-10642</u>

CR #96-0304b

**ABLE 5:** Table 5 shows the LEVEL\_4 to REQ\_BY\_REL links that shall be deleted by this CCR.

RbR ID	L4 ID
IMS-0120#A	S-CLS-00140
IMS-1380#A	S-CLS-00140



**ABLE 6:** Table 6 shows the mandatory attribute values for the Level 4 requirements relavent to this CCR that are currently in RTM MAIN.

<b>A_Rqt_Id</b>	<b>Rqt Type</b>	<b>Rel</b>	<b>Req Status</b>	<b>Verification Method</b>	<b>Text</b>
3-CLS-00140	functional	A	incremental	demo	The DESKT CI shall provide a standard widget set for building a user interface.
3-CLS-01610	functional	A	incremental	demo	The DESKT CI shall provider users with the ability to change the default icon size.
3-CLS-01620	functional	A	incremental	demo	The DESKT CI shall provide users the ability to change the spacing of icons.
3-CLS-00150	functional	B	incremental	test	The DESKT CI shall provide container desktop objects.
3-CLS-00160	functional	B	incremental	test	The DESKT CI shall provide document desktop objects.
3-CLS-00170	functional	B	incremental	test	The DESKT CI shall provide application desktop objects.
3-CLS-00180	functional	B	incremental	test	The DESKT CI shall provide users the capability to execute software associated with a desktop object.
3-CLS-00190	functional	B	incremental	test	The DESKT CI shall provide users the capability to create desktop objects.
3-CLS-00200	functional	B	incremental	test	The DESKT CI shall provide users the capability to destroy desktop objects.
3-CLS-00210	functional	B	incremental	test	The DESKT CI shall provide users the capability to open desktop objects.
3-CLS-00230	functional	B	incremental	test	The DESKT CI shall provide users the capability to copy a desktop object.
3-CLS-00250	functional	B	incremental	test	The DESKT CI shall provide users the capability to move desktop objects.
3-CLS-00290	functional	B	incremental	test	The DESKT CI shall provide users the capability to bind a service to a desktop object.
3-CLS-00300	functional	B	incremental	test	The DESKT CI shall provide users the capability to invoke any service bound to a desktop object.
3-CLS-00330	functional	B	incremental	test	The DESKT CI shall provide users the capability to add desktop objects to container objects.
3-CLS-00340	functional	B	incremental	test	The DESKT CI shall provide users the capability to remove desktop objects from container objects.
3-CLS-00370	functional	B	incremental	test	The DESKT CI shall provide users the capability to browse the objects contained in container objects.
3-CLS-00380	functional	B	incremental	test	The DESKT CI shall provide users the capability to display on a continuous basis the objects contained in container objects.
3-CLS-00390	functional	B	incremental	test	The DESKT CI shall provide the capability to iconically represent desktop objects.
3-CLS-00400	functional	B	incremental	test	The DESKT CI shall provide the capability to textually represent desktop objects.
3-CLS-01500	standards	B	incremental	test	The DESKT CI user interface shall conform to the guidelines in Version 4.0 of the ECS User Interface Style Guide (June 1, 1994).
3-CLS-00080	functional	A	incremental	demo	The DESKT CI shall provide a GUI interface with self-explanatory error messages.